and Ansaldi fail to teach an arrangement for controlling the contrast of a heads-up display relative to an environmental [*sic*] approaching the moving vehicle." The Examiner then alleges that "Woolfson et al. teaches a related heads-up display including a video camera 5 and television screen 10. . . [that] discriminates [ ] the target 11 against the background on the basis of mass intensity contrast. . . ."

Applicant reiterates the objection to combining Roberts and Ansaldi made in the Response filed June 13, 2002. The condition of the road, as discussed in Ansaldi, is not a concern or problem encountered in Roberts. Roberts is concerned with "matching the peak reflected or emitted frequencies of light produced by the instrument with a predetermined tint field "and increas[ing] the primary image contrast relative to the ambient background light by reducing the amount of in-band light which is readily apparent on the background." (Roberts, col. 7, lines 31-34, 45-48.) Further, there is nothing in Ansaldi that suggests that the adhesion sensors are environmental images or include optical detectors. (Ansaldi, col. 12, lines 63-65.) There is simply no motivation to combine the art. Without any motivation to modify the reference, there can be no prima facie case of obviousness. *ACS Hospital Systems, Inc. v. Monteffore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

Further, the combination of Roberts and Ansaldi with Woolfson does not create a *prima facie* case of obviousness. The present invention relates to a heads-up display for a vehicle wherein an environmental image is captured and the heads-up display is modified to be in contrast with the heads-up display. Roberts relates to a heads-up display for moving vehicles that includes a transparent sheet. Ansaldi discloses a method of avoiding collisions between a motor vehicle and various obstacles. Woolfson discloses a video signal processor for discriminating a target using a video camera and a video screen. Woolfson is therefore non-analogous art and not combinable under the test for non-analogous art from *In re Wood*, 599 F.2d 1032, 202 USPQ 171 (CCPA, 1979). First, it must be decided if the reference is within the field of the inventors' endeavor. In this case, Woolfson is clearly not in the same endeavor as the Applicant's invention. Woolfson relates to a tracking system using a monitor and Applicant's invention is a heads-up display having increased contrast.

Secondly, the reference must be reasonably pertinent to the particular problem with which the inventor was involved. *Id.* The present application was concerned with making a heads-up display whereas the display was directed onto the vehicle windshield to control the contrast of the display relative to the environmental image. Woolfson, on the other hand, is a tracking system using a video camera 5 and a monitor 10. There is no heads-up display in Woolfson to contrast with an environmental image. In Woolfson, the image is shown only on the monitor. Further, Woolfson does not control the contrast of a heads-up display relative to the environmental image. Woolfson controls one aspect of the environmental image (a plane) relative to another aspect of the environmental image (a cloud). Accordingly, Woolfson is clearly a different problem and therefore not analogous art. *In re Clay*, 966 F.2d 656, 23 USPQ2d 108 (Fed.Cir. 1992); *In re Oetickor*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed.Cir. 1992).

As discussed above, Woolfson does not teach, suggest, or disclose that which the Examiner alleges. For example, Woolfson is not a heads-up display as the Examiner alleges. Secondly, as the Examiner admits in the Office Action, Woolfson discriminates the target against the background. It does not discriminate the heads-up display relative to the captured environmental image. Accordingly, the combination of art cannot be the basis for an obviousness rejection.

Regarding claim 6, the Examiner stated that it would have been obvious to select "the contrast color red or yellow to the background of an environment as claimed." However, Ansaldi does not teach, suggest, or disclose a contrast selecting a color based on contrast to the environmental image. Ansaldi is merely concerned with proximity. If the object is close, the color in the display is red regardless of the environmental conditions.

Regarding claim 7, the prior art does not disclose, teach, or suggest selecting an appropriate pattern for the heads-up display. Ansaldi discloses colors based on proximity of an object to the vehicle. Woolfson does not disclose changing the pattern of a display so that its characteristics do not match the characteristics of the background, *i.e.*, if the

"environment consists of land with many details, such as gravel road 34, the heads-up display 36 may be selected to be in elongated bars." (Specification, page 3, lines 18-20.)

Woolfson does not disclose changing the pattern of the display. Woolfson may show changing the shape of the pixels in the display in the figures. However, that is not specifically discussed or taught. Further, changing the pixels of a display when the background is a gravel road will not increase the contrast of the display. Woolfson simply does not teach, suggest, or disclose what the computer does when one object is over another object. In the present invention, because it is a heads-up display, there would be a contrast between the heads-up display and the object and both would be distinguishable and viewable. In Woolfson, because it is a display on a monitor, and not a heads-up display, both objects cannot be distinguishable and viewable if a pixel is supposed to represent both objects..

Regarding claim 8, the prior art does not disclose, suggest, or teach selecting an appropriate color for the heads-up display. Ansaldi discloses using alternative colors which however are not selected based on the environmental image, but on the proximity to the vehicle. Woolfson also does not select a display color based on the captured image.

Claim 12 is a method claim similar to claim 5. Claim 12 is patentable over the prior art for the same reasons claim 5 is patentable over the prior art.

Although not specifically addressed in paragraph 2 of the Office Action, claims 18 and 20 are patentable over the prior art for the same reason claim 7 is patentable, *i.e.*, the prior art does not teach, suggest, or disclose changing the pattern of the display based on the environmental image.

Claims 19 and 21 were not specifically mentioned in paragraph 2 of the Office Action. However, claims 19 and 21 are patentable over the prior art for the same reasons as claim 8.

The Examiner rejected claims 5-8 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Roberts in view of Kadomukai et al. (JP 402227340) and further in view of Woolfson.

Applicant reiterates the objection made to combining Roberts and Kadomukai made in the Response filed June 13, 2002. The Examiner stated:

> It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the controlling contrast taught by Kadomukai at al in the HUP [sic] of Roberts because this would allow the driver to easily distinguish the obstacle.
> Office Action mailed September 13, 2002, ¶ 9.

Distinguishing obstacles is neither a problem nor concern of Roberts. As discussed above, Roberts is concerned with "matching the peak reflected or emitted frequencies of light produced by the instrument with a predetermined tint field" and "increas[ing] the primary image contrast relative to the ambient background light by reducing the amount of in-band light which is readily apparent on the background." (Roberts, col. 7, ll. 31-34, 45-48.) Again, there is simply no motivation to combine the art. Without any motivation to modify the reference, there can be no prima facie case of obviousness. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

The Examiner correctly stated that Roberts and Kadomukai "fail to teach an arrangement for controlling the contrast of the heads-up display relative to an environmental [sic] approaching the moving vehicle" and then combined Roberts and Kadomukai with Woolfson. Applicant respectfully disagrees that the art is combinable and that even if combinable, the prior art, alone or in combination, does not teach, suggest, or disclose the claimed invention.

As discussed above, Woolfson is non-analogous art. It is clearly not in the Applicant's endeavor or relate to the same problem. *In re Clay*, 966 F.2d 656, 23 USPQ2d 108 (Fed.Cir. 1992); *In re Oetickor*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed.Cir. 1992). Woolfson discloses a video signal processor for discriminating a target using a video camera and a video screen. The present application was concerned with making a heads-up display whereas the display was directed onto the vehicle windshield to control the contrast of the display relative to the environmental image. Woolfson, on the other hand, is a tracking system using a video camera 5 and a monitor 10. There is no heads-up display in Woolfson to contrast with an environmental image.

Regarding claim 8, the Examiner stated that "Kadomukai et al teaches a signal processing part 1 for changing and selecting the display portion of the symbol to such a position that is large in the contrast colors between the symbol and the background color." (*emphasis added*) (Office Action, September 13, 2002, paragraph 10.) The Examiner has not shown how Kadomukai's changing positions makes Applicant's invention relating to changing colors obvious. Ansaldi does not teach, describe, or suggest changing colors of the display relative to the environmental image.

The remaining claims are patenable over the prior art for the same reasons cited above. Accordingly, Applicants contends that claims 5-8 and 12 are patentable over the cited art. The Examiner does not refer to claims 19 and 21 in paragraph 10 of the September 13, 2002 Office Action but refers to those claims in paragraph 11. Applicant contends that claims 19 and 21 are patentable over the cited art for reasons already discussed. Namely, the Examiner has not shown how "changing and selecting the display portion of the symbol to such a position that is large in contrast colors between the symbol and the background color" makes the invention relating to changing colors obvious.

The Examiner also rejected claims 5-8 and 12 under 35 U.S.C. § 103 as being unpatentable over Ejiri et al. (U.S. Patent No. 5,969,969) in view of Woolfson.

As above, Woolfson is not combinable with Eijiri to form the basis for a prima facie case of obviousness. As thoroughly discussed above, Woolfson is nonanalogous art. *In re Wood.*

Further, there is no motivation to combine Eijiri and Woolfson. Eijiri is concerned with detecting objects around a vehicle using proximity sensors. Eijiri, Absract. Woolfson relates to a tracking system having a monitor and not a heads-up display. There is simply no motivation to combine a tracking system with a proximity system incorporating proximity sensors. *ACS Hospital Systems, Inc. v. Monteffore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

Further, even if combinable, the prior art does not teach the invention as claimed. The Examiner improperly combined Ejiri's two separate systems which even if combined do not describe each and every element of Applicant's invention as claimed. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236; 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). While Ejiri does disclose a camera, the shape information of the target and the displayed circles referred to by the Examiner comes from proximity sensors 125, not the camera. The proximity sensors merely detect the presence of an object and do not provide additional information. The white circles or black circles 125a, 125b are not in contrast relative to an environmental image. Figures 34 and 35 are overhead images of the car that do not show environmental features approaching the vehicle captured by an optical detector. Further, Ejiri does not teach that the overhead image and the circles change relative to the background.

The Examiner discusses Eijiri "controlling the contrast as claimed" and refers to col. 16, lines 38-41 of the patent. These lines read:

> The environmental signal 126a from the distributed proximity sensor 125 is used to get the shape information of the target obstacles detected near the subject vehicle. The information is output onto the display unit 160 as a bird's eye view map that includes the vehicle itself.

This supports the Applicant's position that Eijiri does not teach, suggest, or disclose what the Examiner alleges. A bird's eye view is not an environmental image captured by a camera. Further, there is nothing in this passage that teaches, suggests, or discloses "controlling the contrast".

Regrading claims 18 and 20, as discussed above, Woolfson does not disclose selecting an appropriate pattern for the heads-up display and therefore cannot be the basis for an obviousness rejection. Eijiri does not teach, suggest, or disclose selecting an appropriate pattern based on the environmental image.

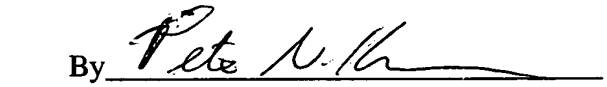
Accordingly, claims 5, 12, 18 and 20, and the claims that depend therefrom, are patentable over Ejiri and Woolfson.

Regarding claims 6-8, the Examiner stated that "Eijiri et al teaches an information processing unit 110 having a selector 113 (see Figure 6, col. 7, lines 58-59)." That is an insufficient basis for a prima facie case of obviousness under *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (particular findings by the examiner are required; broad conclusory statements are not evidence). The Examiner did not make any particular findings as to how Eijiri teaches, suggest, or discloses the invention claimed in claims 6-8, *i.e.*, selecting an appropriate heads-up display dependent on said captured image, selecting an appropriate pattern for the heads-up display dependent upon said captured image, and selecting an appropriate color for the heads-up display dependent upon said captured image. As discussed above, neither Eijiri nor Woolfson teach, suggest, or disclose that which is claimed in claims 6-8.

Applicant believes that he has fully responded to the Office Action and contends that all claims are in condition for allowance and respectfully requests passage to issue.

If the Examiner believes that a telephone conference would further the prosecution of this case, the Examiner is encouraged to contact the Applicant's attorney at the Examiner's convenience.

Respectfully submitted,
ROBIN M. MILLER

By 
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